

Schematic of the Longitudinal Section of Extraction tubes with:

(A) Sol-gel Coating

(B) Sol-gel Monolithic Bed

FIG. 1

Introduction of the Extracted Sample into GC

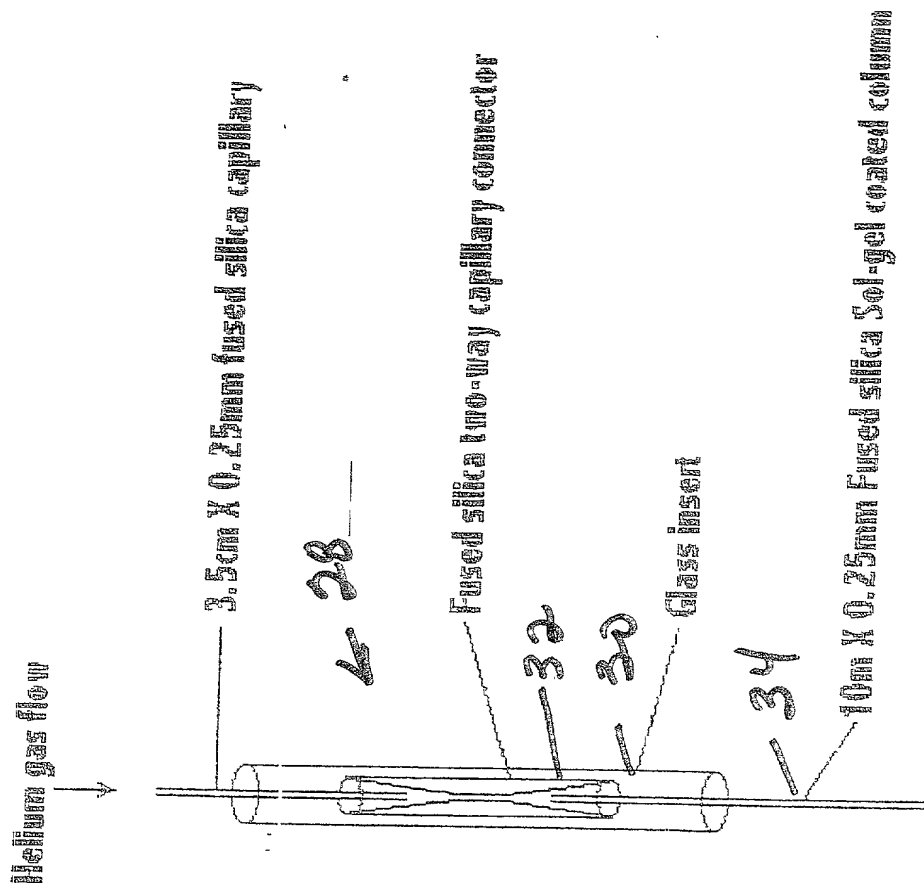
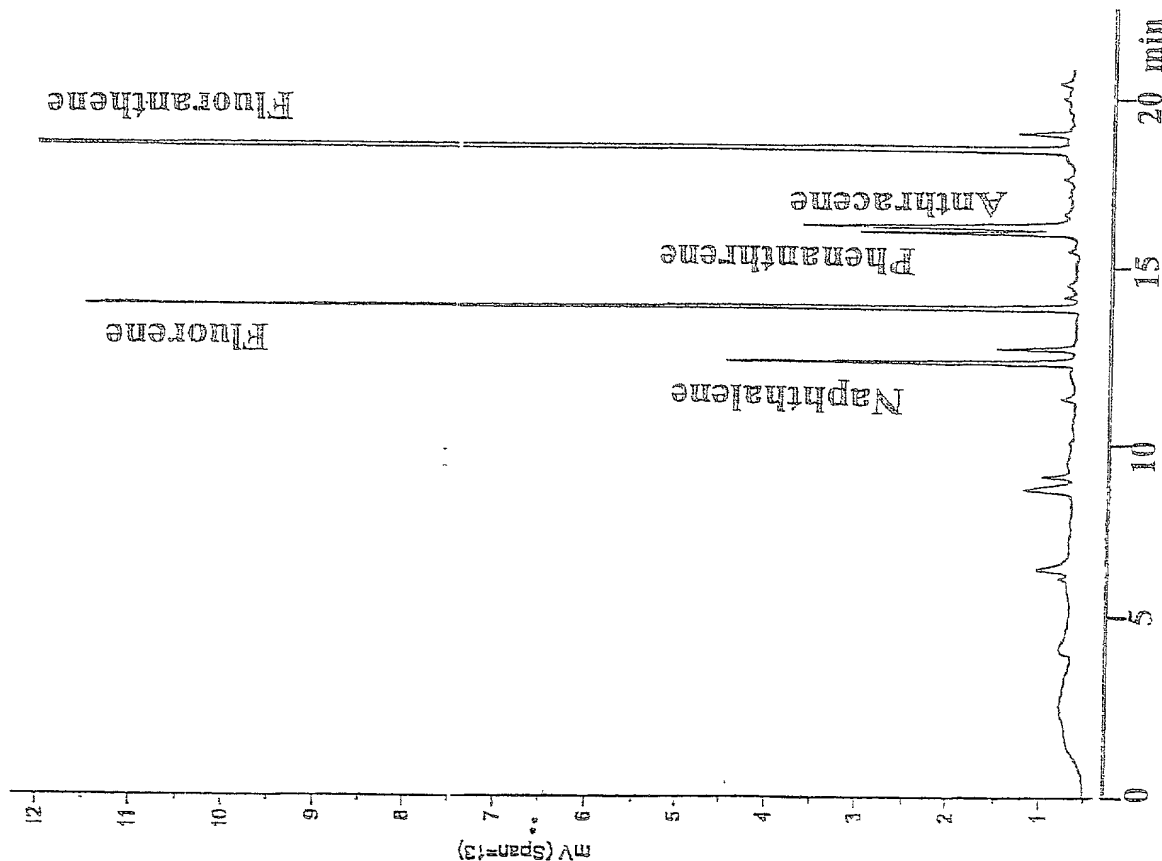


Figure 2

Capillary Microextraction of PAHs from Water



Extraction Conditions:

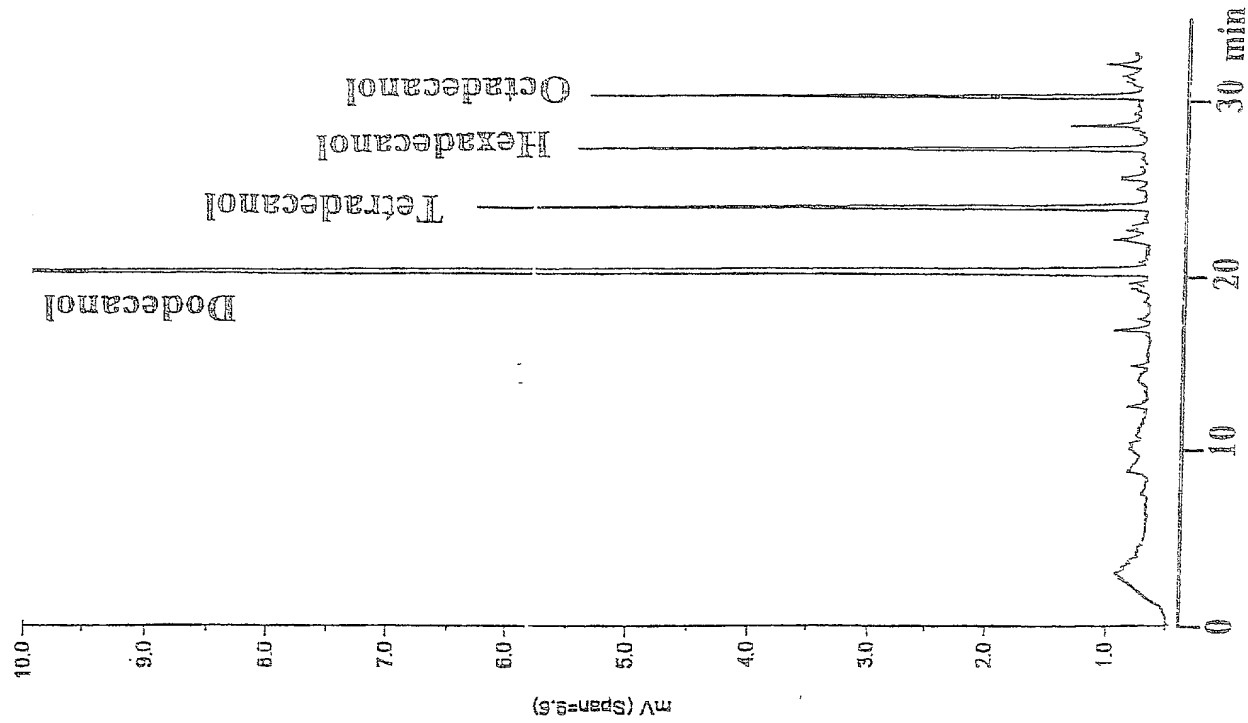
Sol-gel PDMS coated capillary
(35 mm x 250 μ m i.d.)
Extraction for 30 min

GC Conditions:

Sol-gel PDMS Column
(10 m x 250 μ m i.d.)
30°C (5 min), @ 6°C/min

Figure 3

Sol-Gel Capillary Microextraction of Alcohols

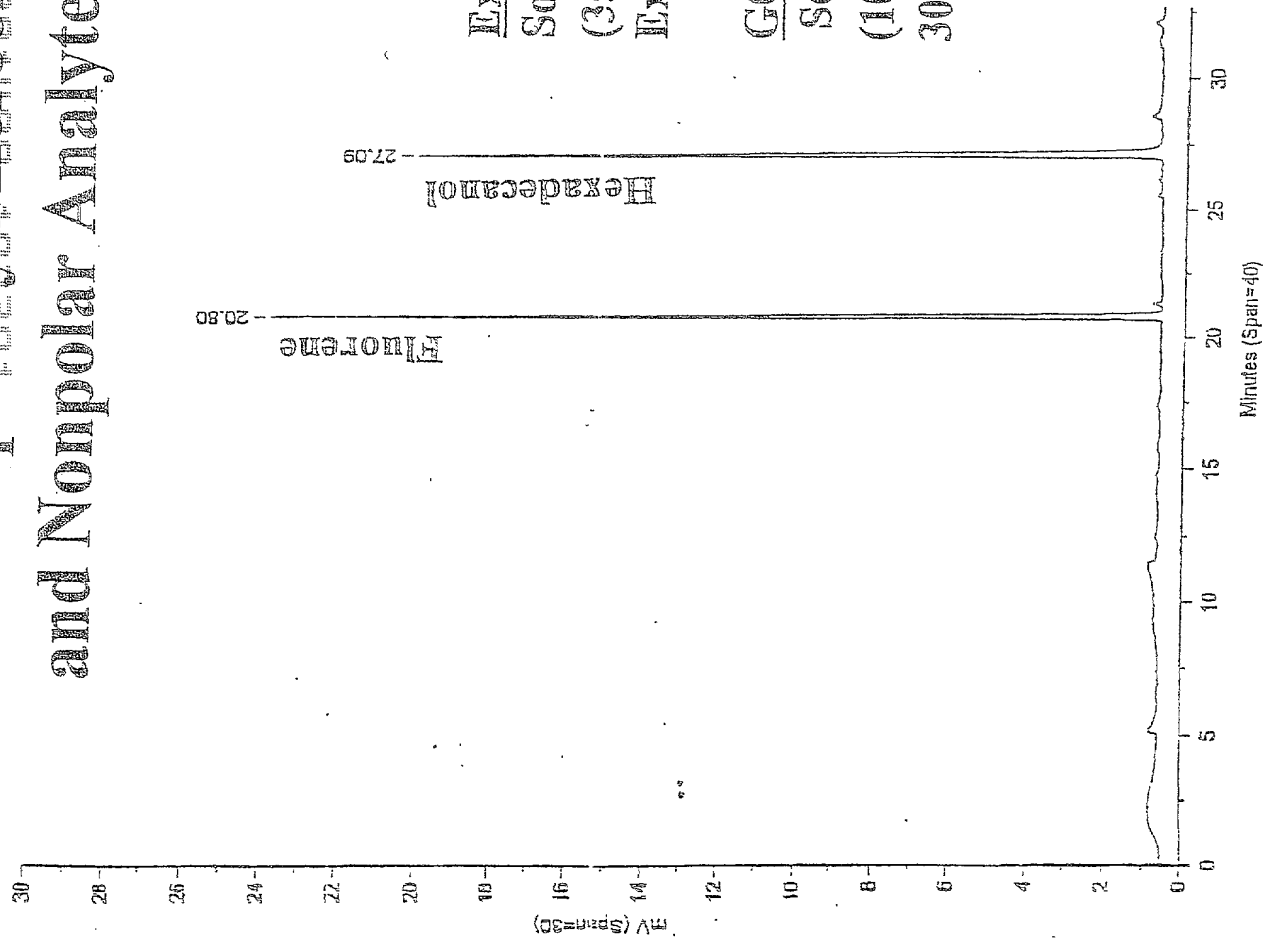


Extraction Conditions:
Sol-gel PDMS coated capillary
(35 mm x 250 μ m i.d.)
Extraction for 30 min

GC Conditions:
Sol-gel PDMS Column
(10 m x 250 μ m i.d.)
30°C (5 min), @ 6°C/min

Figure 4

Sol-Gel Capillary Microextraction of Polar and Nonpolar Analytes from Water



Extraction Conditions:
Sol-gel PDMS coated capillary
(35 mm x 250 μ m i.d.)
Extraction for 30 min

GC Conditions:
Sol-gel PDMS Column
(10 m x 250 μ m i.d.)
30°C (5 min), @ 6°C/min

Figure 5

Mixture of 7 ant. amcs

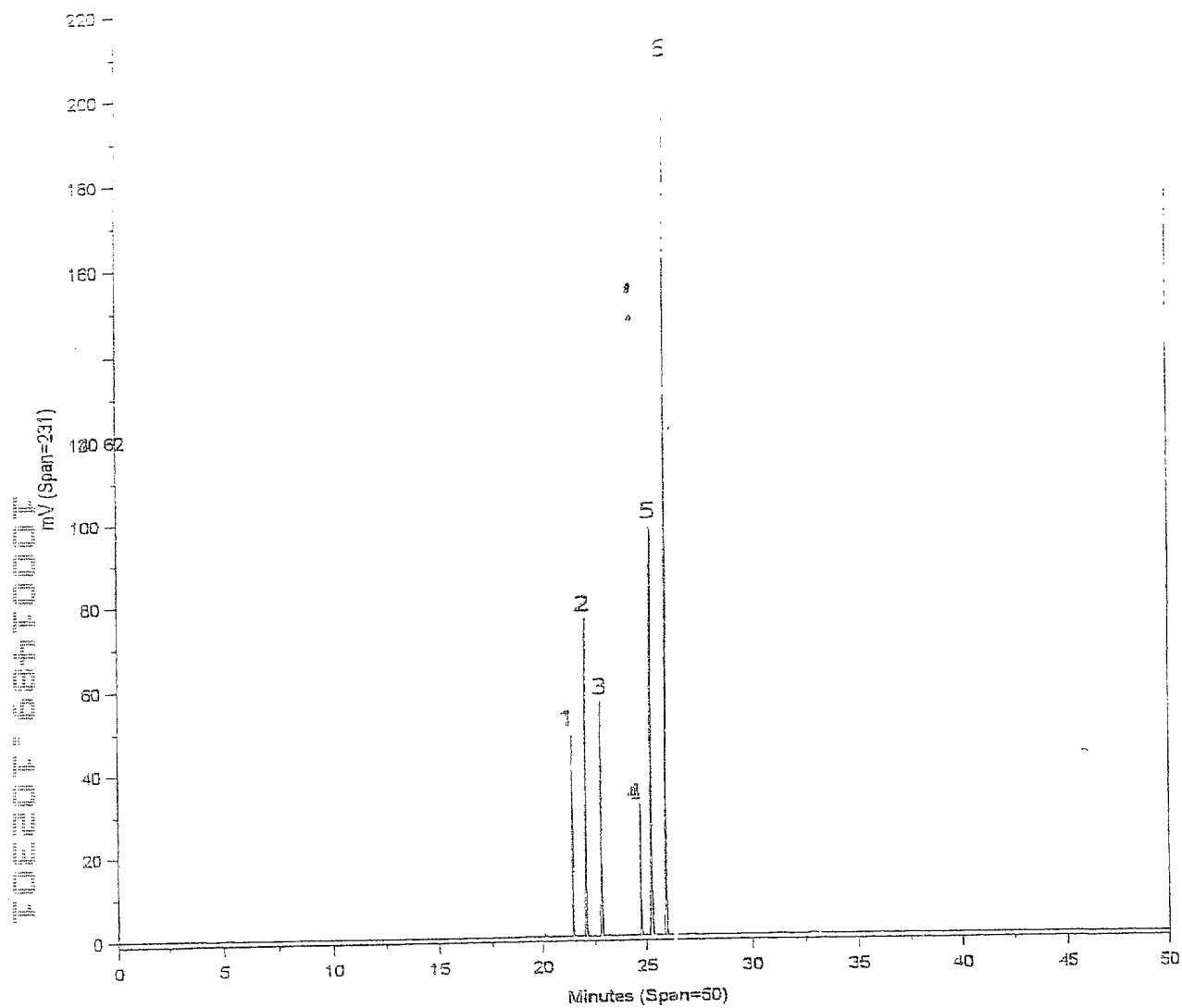
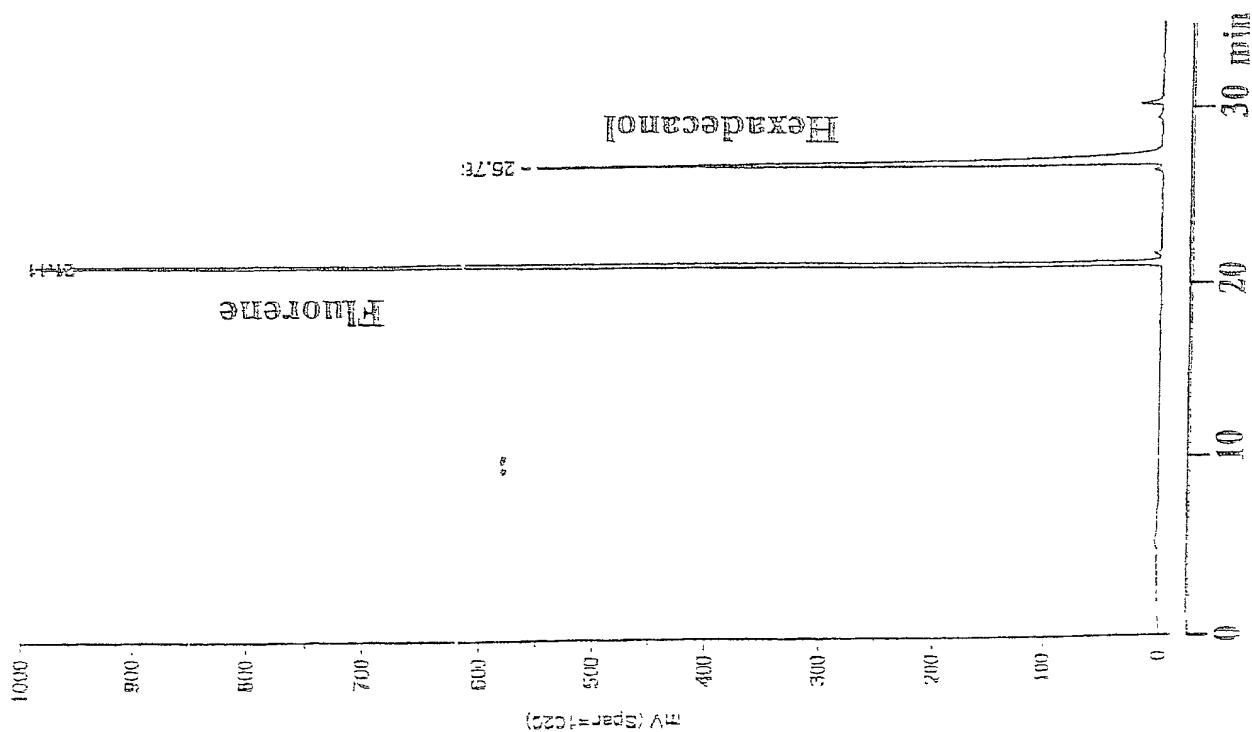


FIG. 6

Sol-Gel ODS Monolithic Bed
35 mm x 50 μ m i.d.

1911

Extraction for 30 min

Desorption at 30°C

GC Conditions:

Sol-gel PDMS Column

(10 m x 250 μ m i.d.)

30°C (5 min), @ 6°C/min

54

Capillary Microextraction: Monolithic vs. Open Tubular

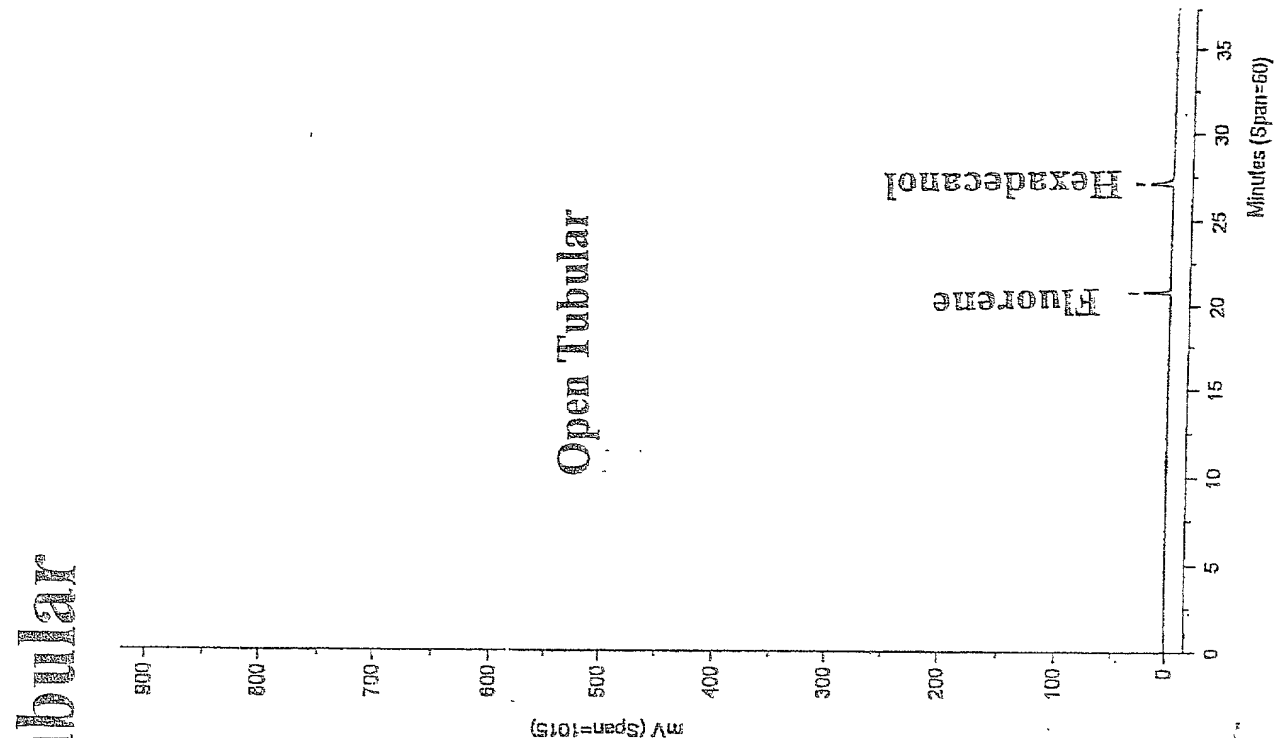
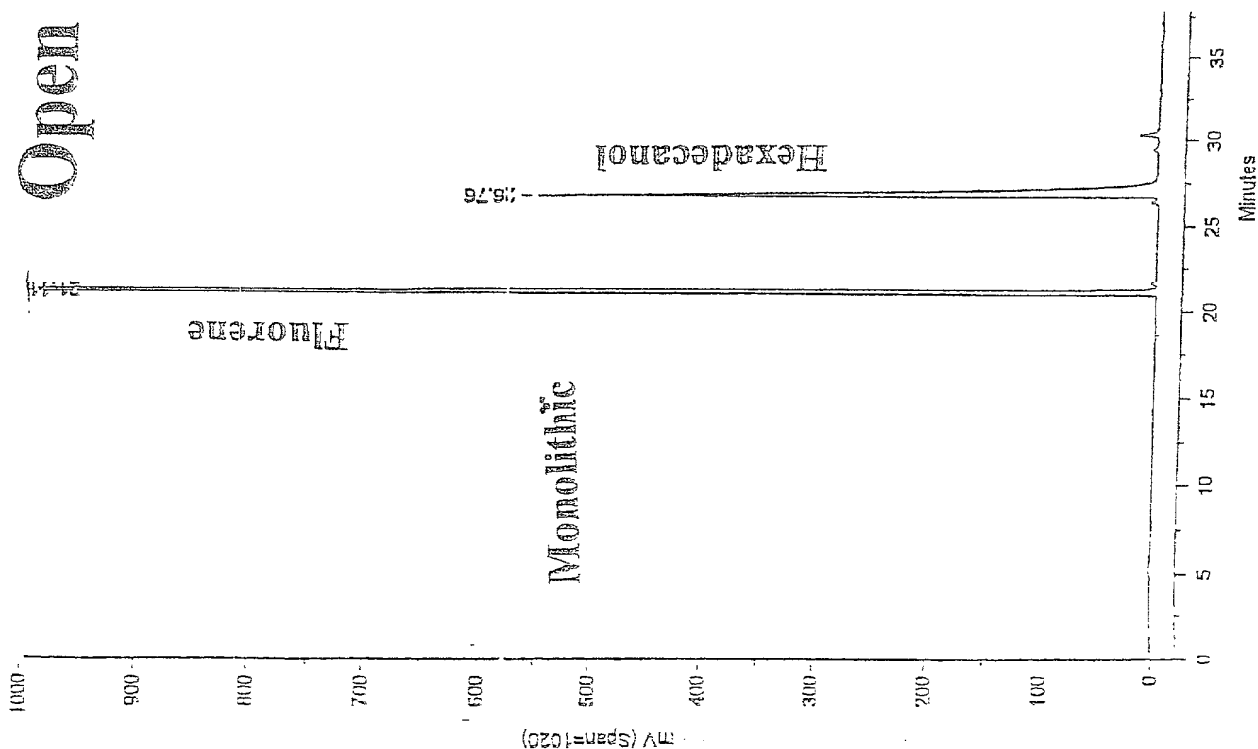


FIG. 9

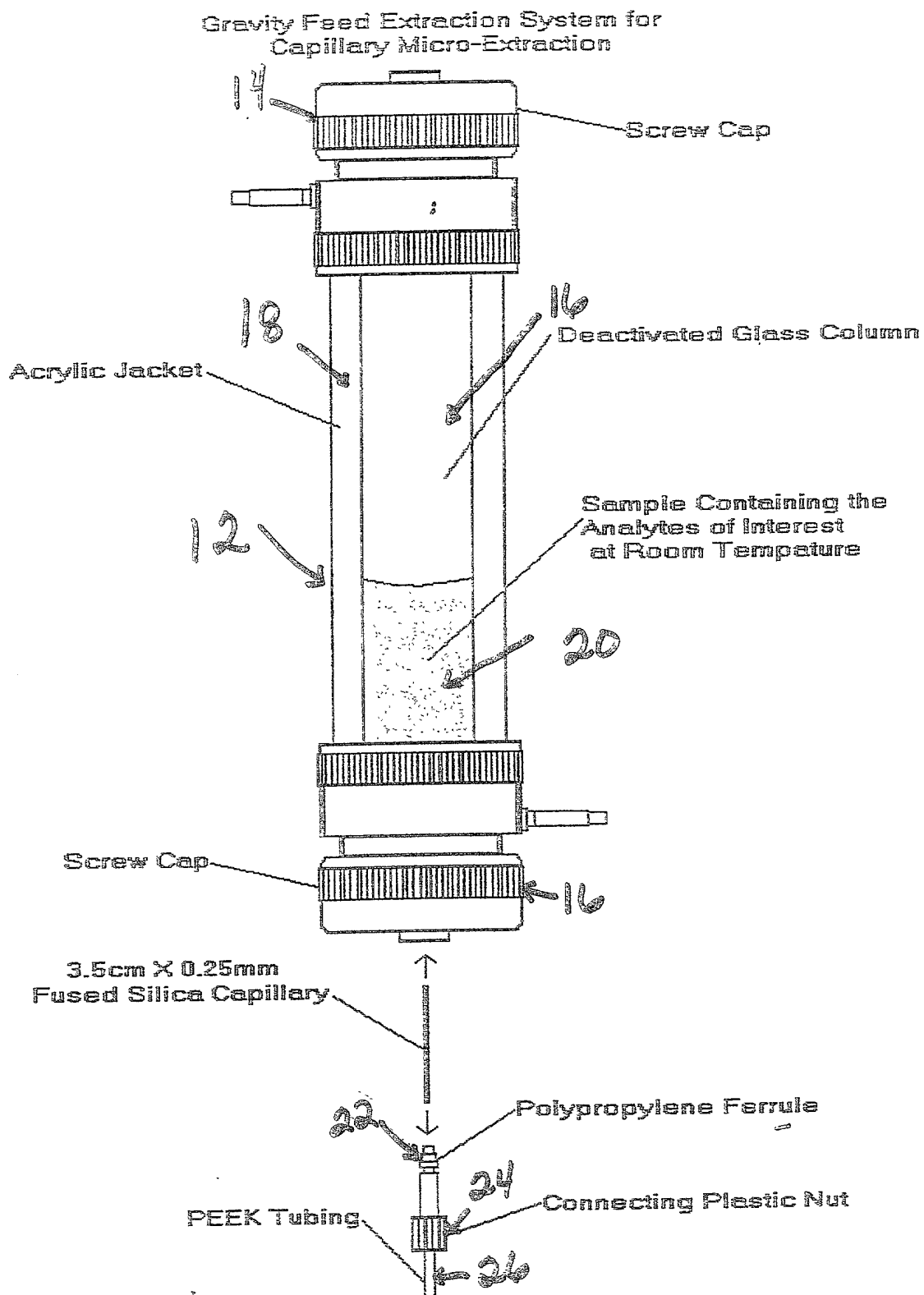


FIG. 9

Home Made Capillary Purging Device

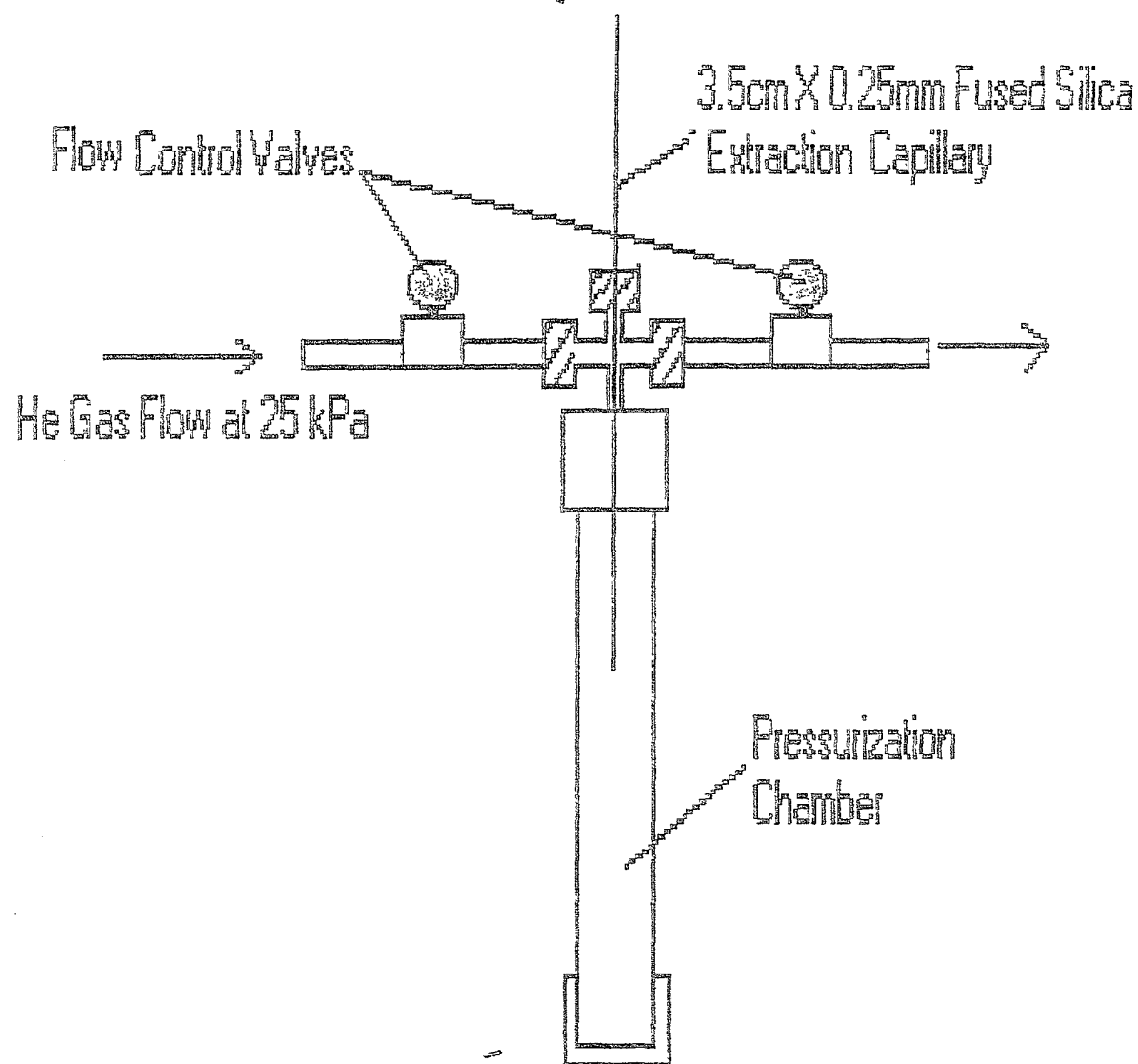


FIG. 10

This is a high-contrast, black and white abstract image. A prominent diagonal white line runs from the bottom left towards the top right, dividing the frame. The upper-left portion of the image is a dark, heavily textured field of black and grey noise. The lower-right portion is a stark, solid white. The diagonal line itself has a slightly grainy, high-contrast appearance.

[illegible]

40004439 40004439

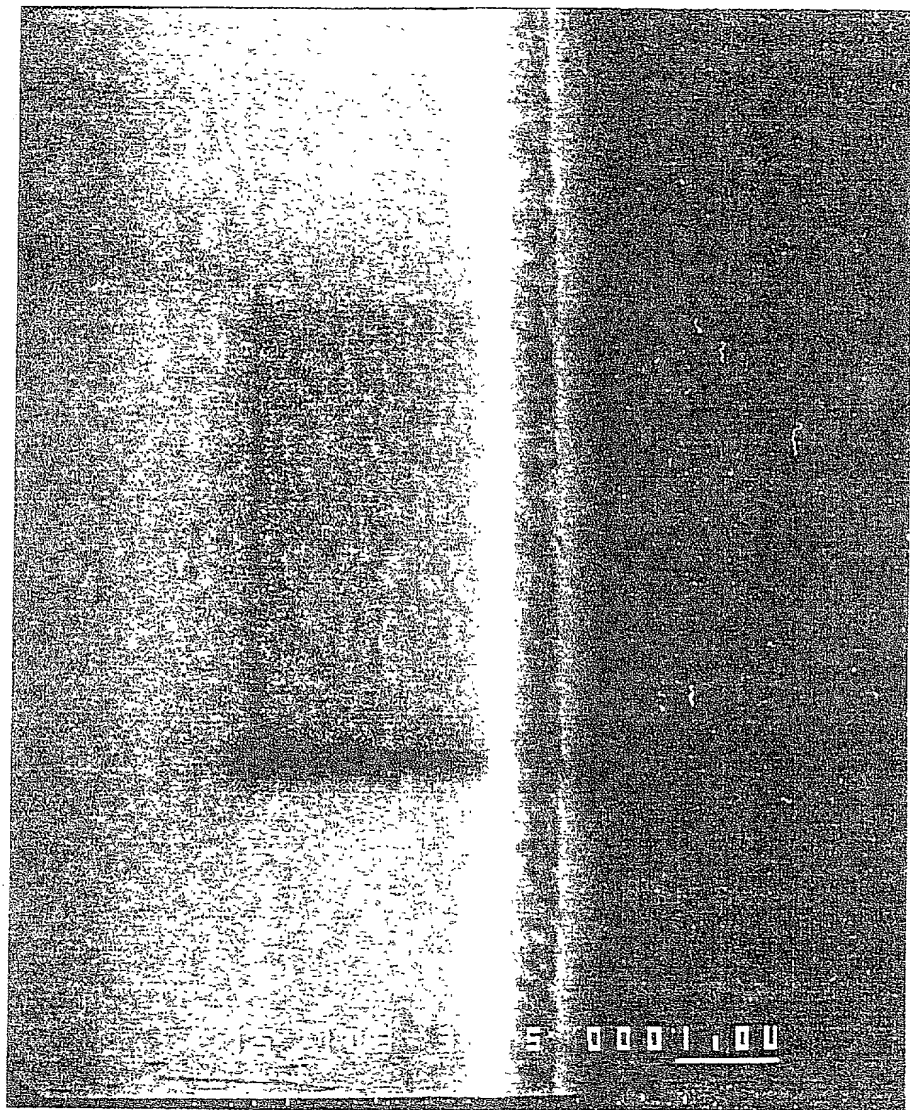


FIG. 11B

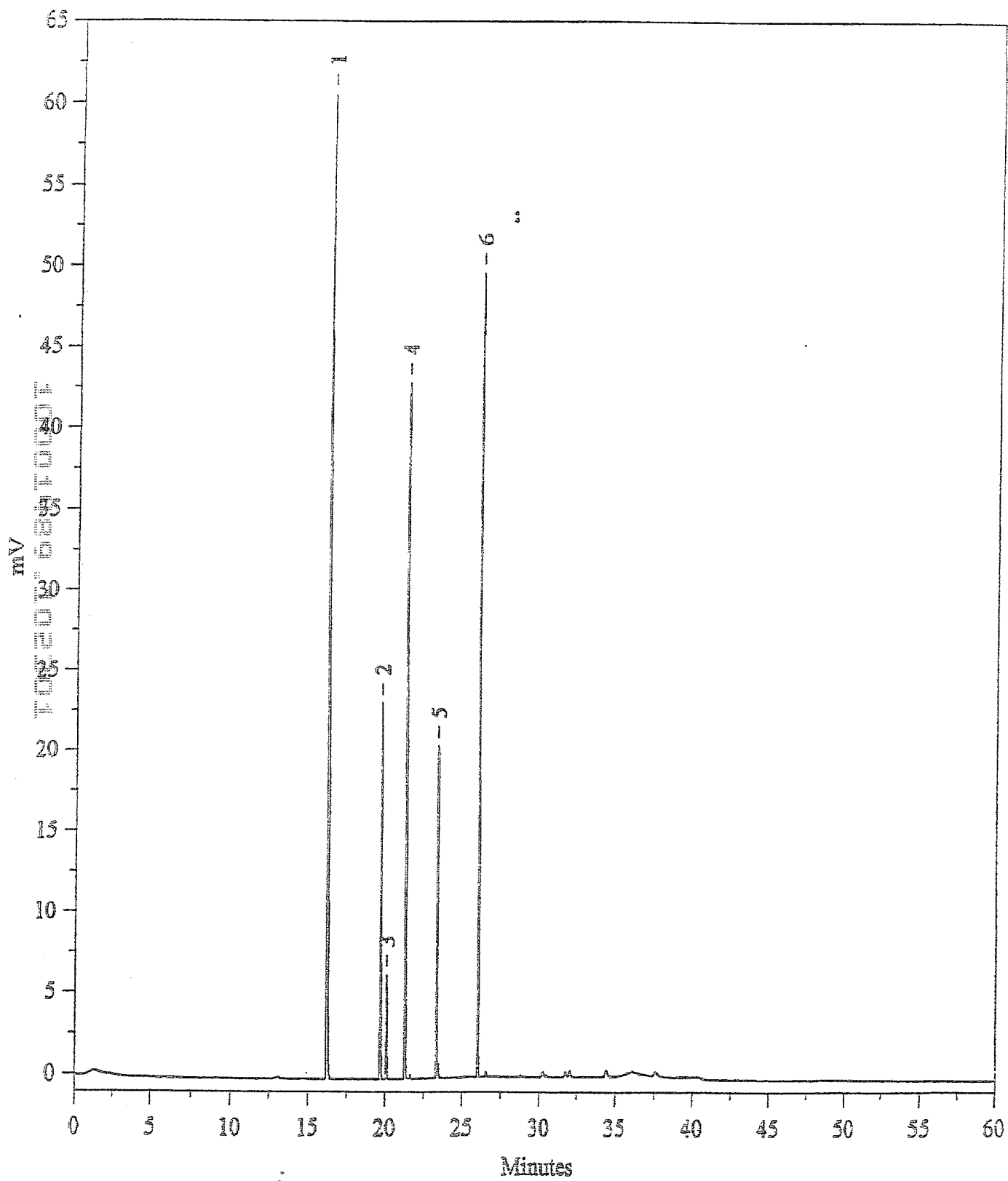


FIG. 12

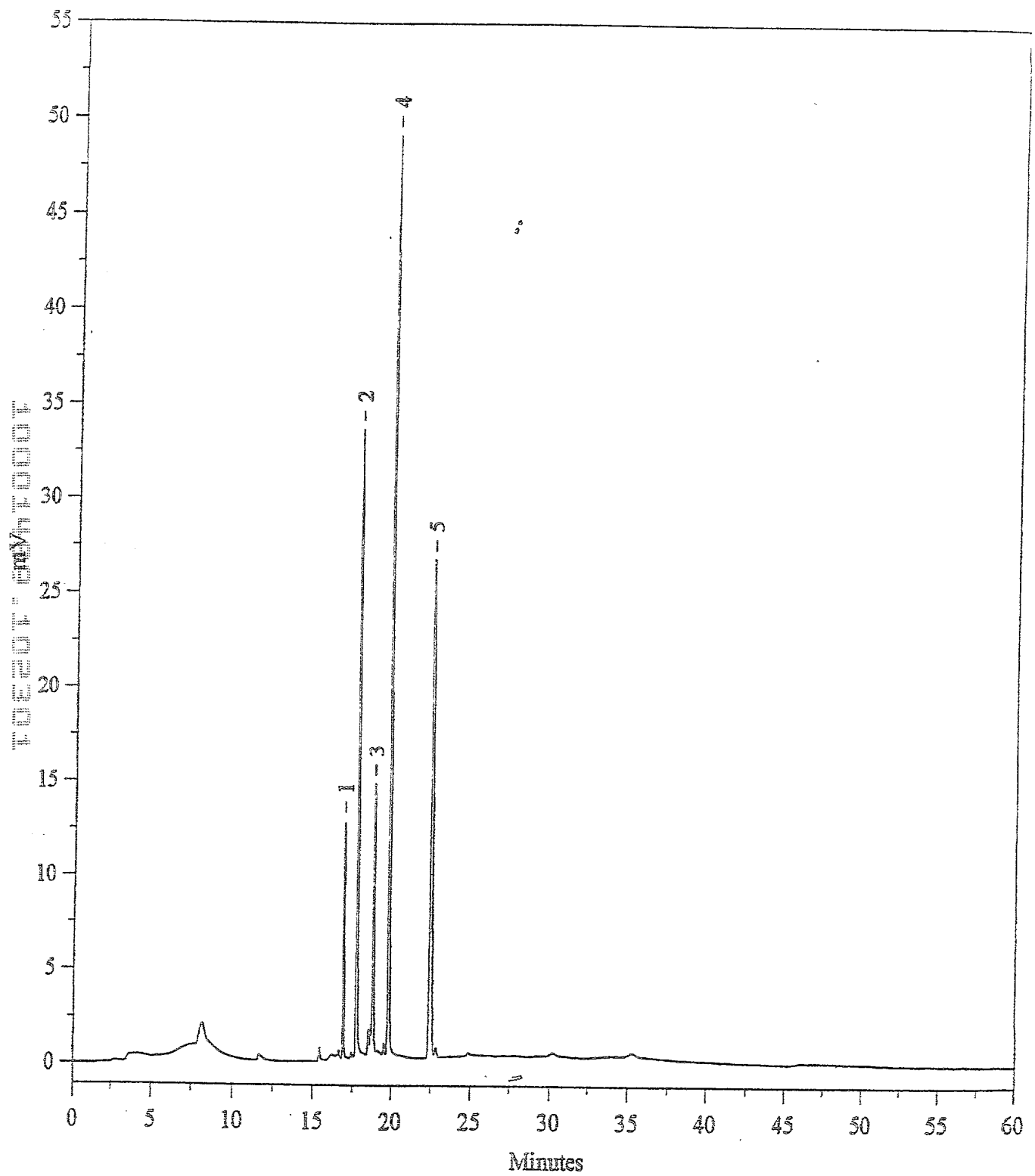


FIG. 13

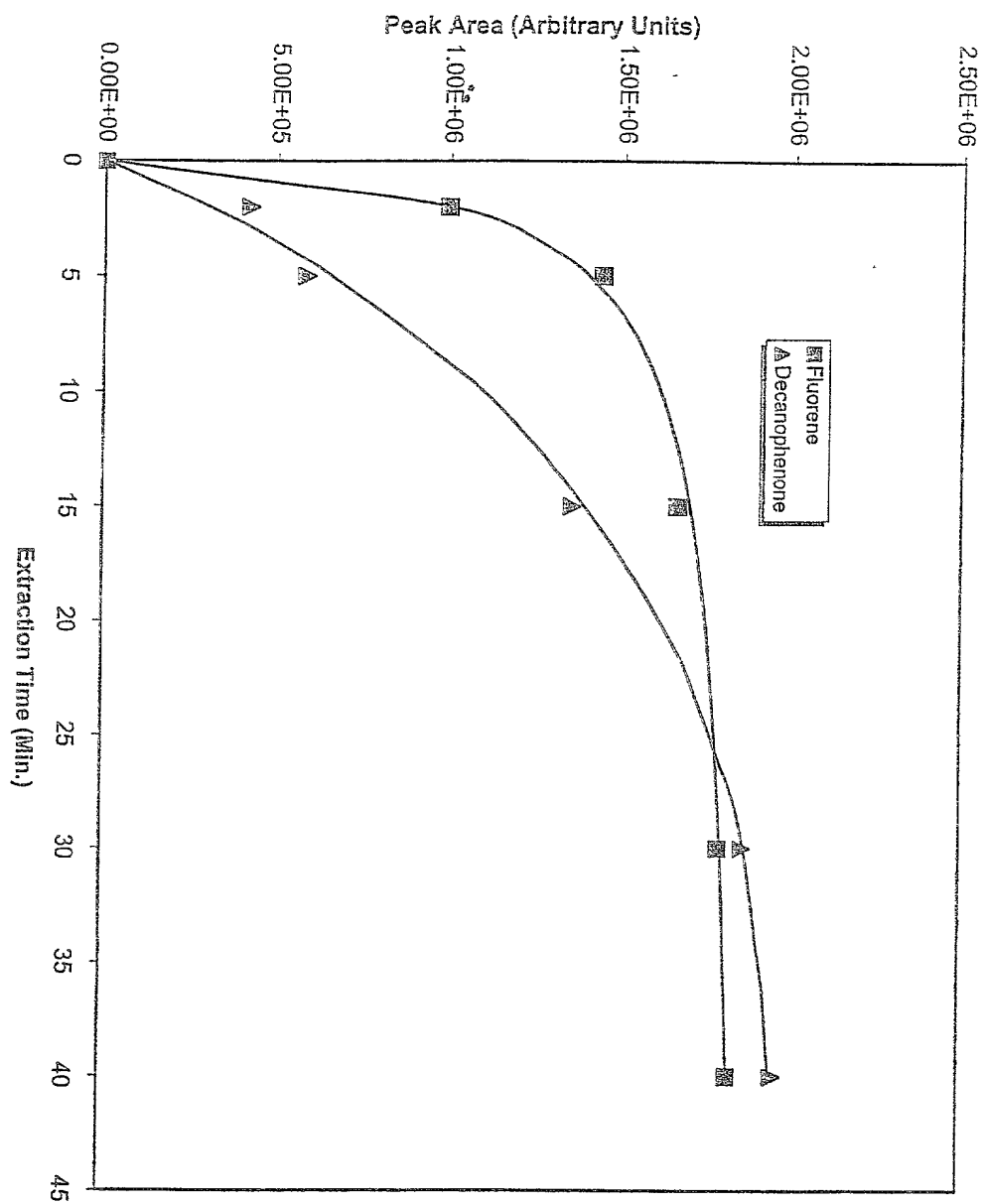


FIG. 15

40004429 40004404

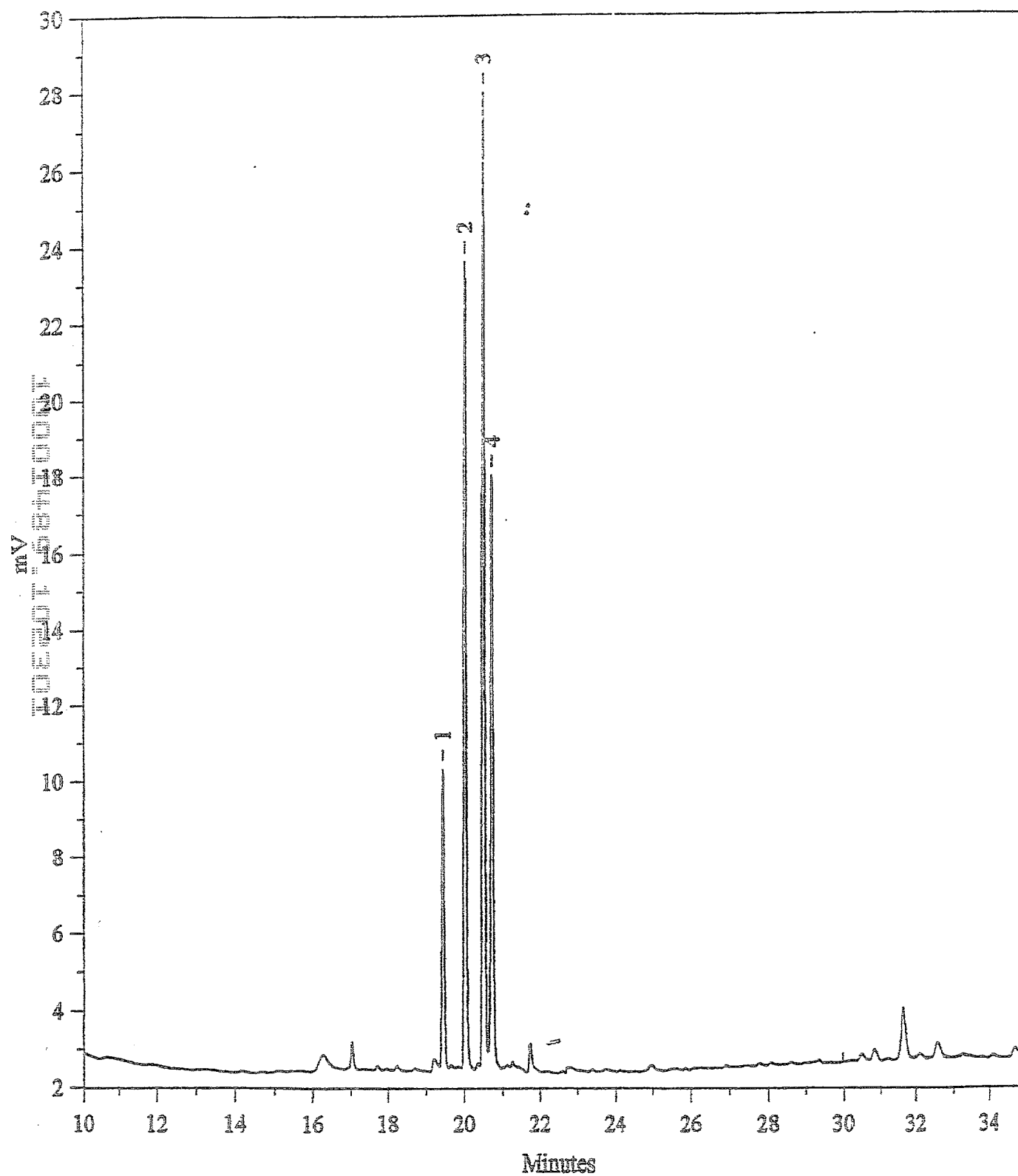


FIG. 16

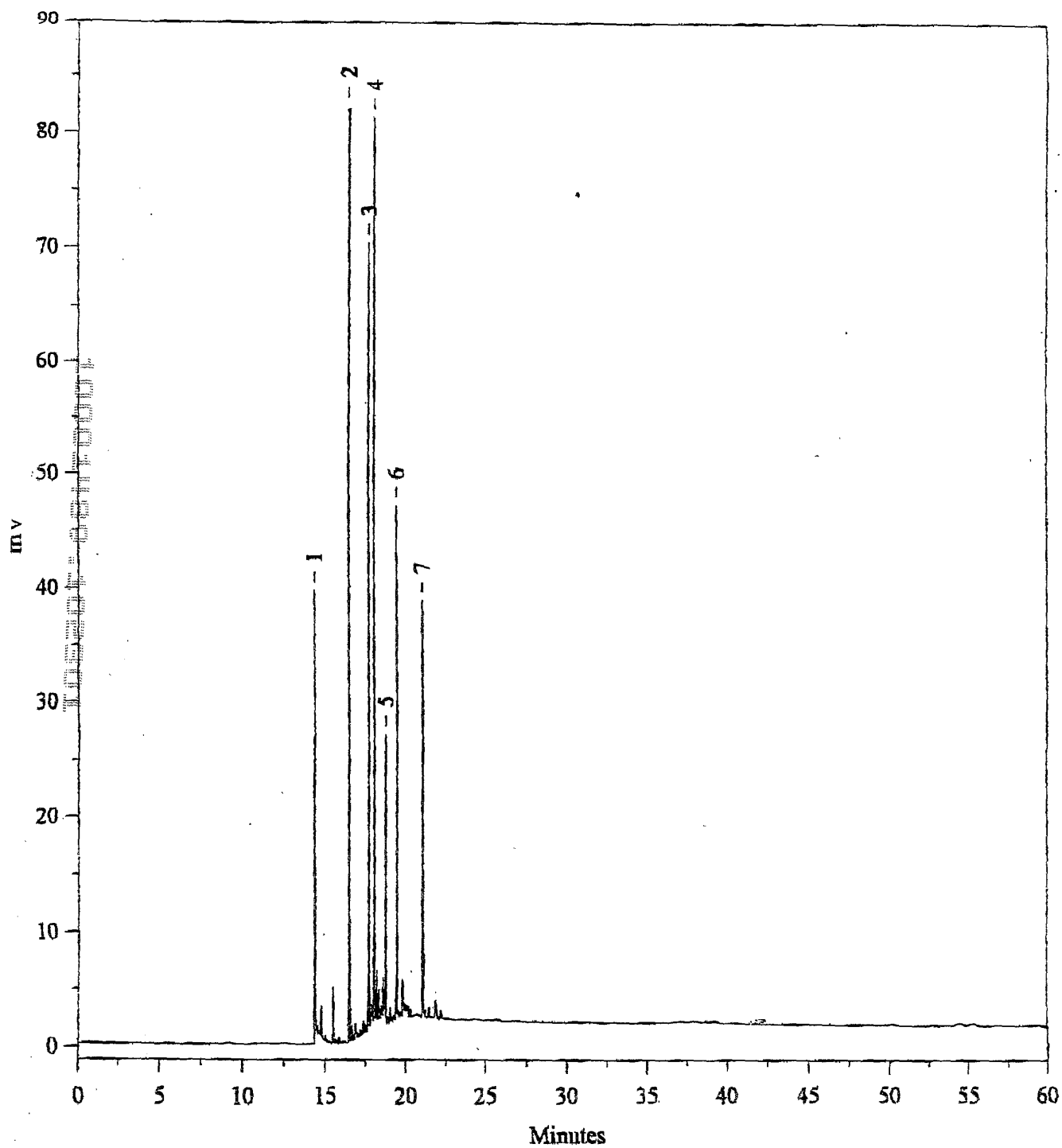
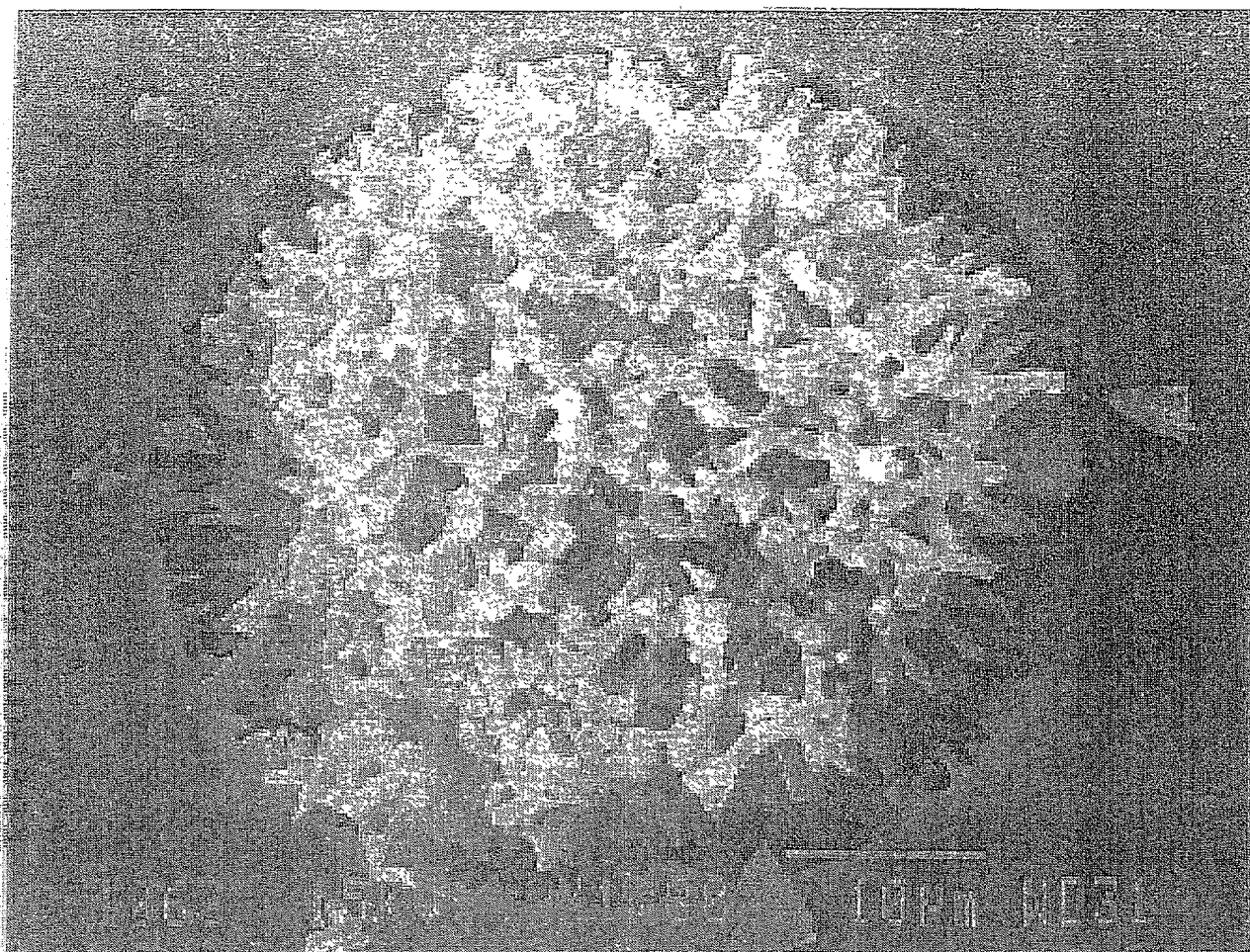


Figure 17.



Scanning Electron Micrograph (SEM) Cross-sectional View
of a Fused Silica Capillary with a Sol-gel Monolithic Bed

FIG. 18